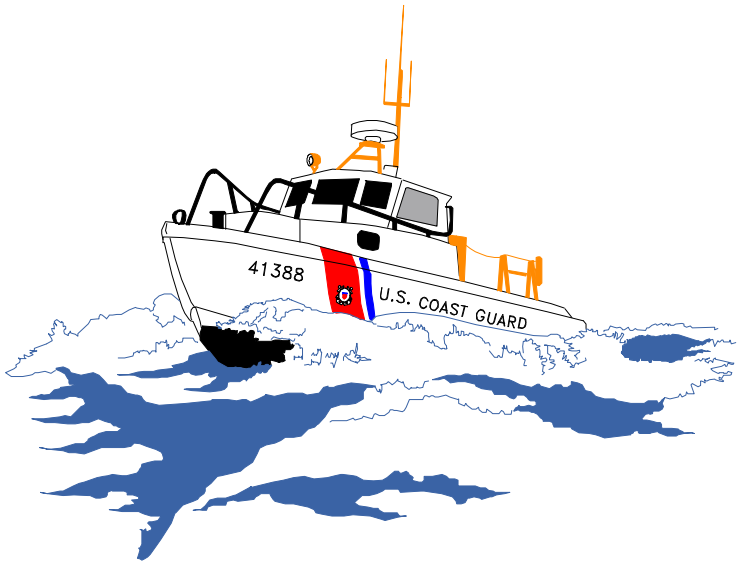
Eleventh Coast Guard District

Fishing Vessel Safety Newsletter



The FISHING VESSEL SAFETY NEWSLETTER is a publication of the Eleventh Coast Guard District

VADM T. H. COLLINS

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Mr. Dennis Robison
District Fishing Vessel Safety Coordinator

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Questions or comments: Call (510) 437 2947

Web Page: http://www.uscg.mil/pacarea/pm

Pacific Area Institutes
OPERATION SAFE RETURN

Coast Guard Pacific Area region encompassing the maritime states of California, Oregon, Washington, Hawaii, and Alaska, has launched the fishing vessel safety campaign "*Operation Safe Return*" on December 1, 1999.

Statistics indicate that commercial fishing is the most dangerous occupation in the U.S. The threat to life and property in the northern Pacific Area is aggravated by cold water, foul weather and remoteness of the North Pacific and Bering Sea.

The Pacific Area Commander's intent for Operation Safe Return is to improve commercial fishing vessel safety by focusing outreach and prevention on high-risk fisheries. High-risk fisheries are fisheries that are routinely short in nature, encourage overloading and operate in any weather conditions. The Coast Guard's goal is to reduce commercial fishing vessel fatalities by lowering the risks through dockside education and safety checks.

The following fishing vessel casualties involved 20 fishermen on four boats. Four lives were lost. Sixteen people were saved because boats were equipped with proper safety equipment, and the crew of one boat practiced emergency drills. There are valuable lessons learned from each of these unfortunate incidents.

Fishing Vessel Hits Jetty

A fishing vessel returning to port after dark from a successful fishing trip hit the rock jetty north of the harbor entrance. Three of the four crewmembers were lost and one was rescued from a life raft. After working most of the night, three crewmembers were below sleeping as the master brought the vessel back to port. The crewmembers were abruptly awakened when the vessel hit the jetty. The survivor followed the other two crewmembers out of the berthing area and saw them carried away by waves, fortunately he was able to reach the life raft. He was later rescued by a Coast Guard helicopter. The master was never seen leaving the wheel house.

The cause of this accident is unknown and will likely remain a mystery, there are some "Lessons Learned" that are worth mentioning.

1. Schedule your arrivals during periods when there is enough light to see a couple of miles. This will minimize the distortion/disorientation that often occurs when inbound from sea at night.
2. Owners/Operators should develop adequate work/rest schedules to ensure the crew is not fatigued during critical operations.
3. Always test and inspect all of your safety equipment, including the EPIRB and life raft, prior to leaving port. If in doubt contact the Coast Guard for additional help or information.

Fishing Vessel Outbound Struck by Wave and Sinks

A fishing vessel outbound on the bar was struck by a large wave and sank. Of four crewmembers three survived and one drowned. As the vessel was crossing the bar two crewmembers were in the wheel house with the master while the third crewmember was on deck. Prior to reaching open water the vessel was hit by a 14-16 foot wave that caused the boat to break up and sink. Three of the crewmembers reached the life raft and launched a flare. They were rescued by a Coast Guard 47-foot motor lifeboat. The master was last seen in the wheel house.

The cause of this accident is under investigation, however, there are some "Lessons Learned" worth mentioning.

1. Before leaving port it is prudent to contact your local Coast Guard Station for bar conditions.
2. If there is questionable bar conditions DON'T attempt to cross until there is adequate light to see the wave conditions for yourself.
3. Inspect your survival suits and practice donning them prior to leaving port. Ensure zippers work and the suits fit properly. During questionable bar conditions always have survival suits readily available.
4. Always test your EPIRB and inspect its hydrostatic release prior to leaving port. Although an EPIRB was on board this vessel, no signal was received.

Sinking Fishing Vessel Runs Aground Rather Than Block Channel

Recently a fishing vessel departing the harbor after unloading its cargo began to list to starboard, rather than block the harbor channel entrance, the master ran the vessel aground. At the time of the grounding the fish hold was approximately half full of water. The master attempted unsuccessfully to counter the list by turning the vessel to starboard, but then decided to run his boat aground rather than let it sink, blocking the harbor. The Coast Guard retrieved all three crewmembers and transported them to the dock.

The cause of this accident is under investigation, however, there are some "Lessons Learned" worth mentioning.

1. Test your high water alarm circuits and inspect spaces with through-hull fittings, including machinery spaces/voids, prior to departing the dock and periodically while underway.
2. Check condition of all suction and overboard discharge hoses to

include the use of double clamps on all hoses.
3. If in doubt call the Coast Guard for a vessel inspection.
4. Always be aware of your vessel's stability limits and be alert for signs of instability and sluggish handling.
5. Radio for help, giving your vessel's name, location and nature of distress immediately upon noticing a flooding or stability problem.
6. Ensure that master and crew are familiar with the use and location of all safety equipment and safety instructions.

Crew of 9, Six Asleep, Vessel Sinks, All Are Alive

A fishing vessel returning from the fishing grounds started listing to port and within three minutes capsized and sank. Prior to sinking six of the nine crewmembers where below decks asleep and three were in the wheel house. The vessel began listing to port and the master attempted unsuccessfully to counter the list by turning to port. While making a May Day call the master sent the two deckhands below to wake up the crew and launch the net skiff. The May Day call was transmitted on Channel 11 vice Channel 16. Due to the severe list the master was unable to change the radio channels. As the master was leaving the wheel house he made sure that his EPIRB was energized and released. All nine crewmembers safely transferred to the net skiff and were picked up by another fishing vessel in the area. Because the Coast Guard does not monitor channel 11, their response was delayed. The master credits the quick and safe evacuation of his crew to the required safety equipment on board and previously practicing emergency procedures during safety drills and instruction.

While the cause of this accident is unknown at this time, and will likely remain a mystery, there are some "Lessons Learned" that are worth mentioning.

1. When transmitting a May Day call, every effort should be made to make the call on VHF channel 16. Also, it's extremely important to describe your position using Latitude and Longitude or range and bearing from a known point. If you hear a May Day call, and after a short pause there is no Coast Guard response you should relay the call immediately to the Coast Guard (every minute counts).
2. Be familiar with the location of your EPIRB and how it operates. Always inspect and test your EPIRB prior to leaving port. And, take it with you when abandoning a sinking vessel.
3. Conduct emergency drills - they do make a difference. This will familiarize crew members with the use and location of all safety equipment in various situations.
4. Test your high water alarm circuits and inspect the integrity of all weather/watertight openings prior to leaving port. When underway frequently inspect spaces with through-hull fittings, machinery spaces, and spaces with non-watertight hatches.
5. Always be aware of your vessel's stability limits and be alert for signs of instability and sluggish handling.

Commercial Fishing Vessel Safety

By Robert Lee, Dockside Examiner, MSO San Francisco

Fishing Vessel Stability -- Is Your Vessel Safe?

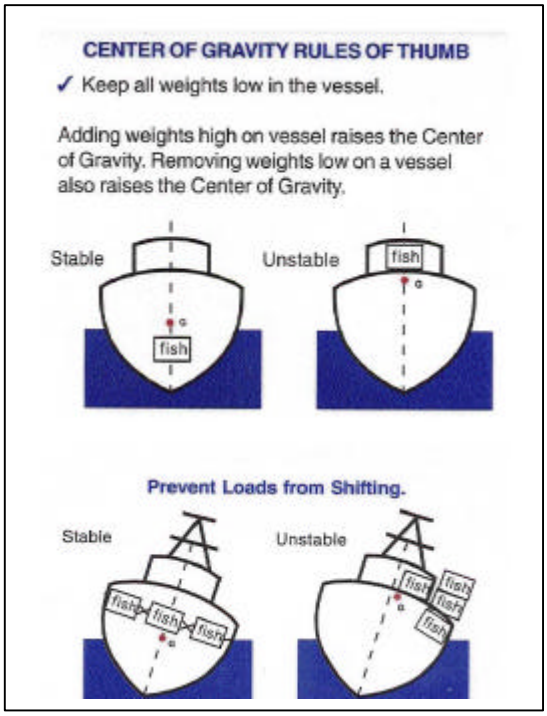
Vessel stability is a critical issue that has played a big role in many fishing vessel casualties. Every vessel has a roll that it cannot recover from and cannot right itself. Most vessels get in trouble much sooner when the roll submerges the deck edges. When a vessel's downwind deck edge goes under water and water accumulates on the deck, it takes more effort for the vessel to right itself. The boat is then spending more time underwater. The underside of the vessel is being hit by waves, hatches and doors may open, bulkheads may fail, and cargo may shift. Now the vessel is sinking.

Quick Tips:

- ✓ Keep weights low.
- ✓ Minimize width of tanks and holds.
- ✓ Keep freeing ports open.
- ✓ Prevent loads from shifting.

In a recent casualty a vessel heavily laden with crab pots experienced a problem where it became dead in the water. Waves began breaking over the stern and between the weight of the crab pots and the water from the waves the vessel sank within a few minutes. Luckily all three people were rescued.

With the Dungeness Crab season now underway, fishermen need to know the limitations of their vessels and maintain them to prevent situations like this from happening. The following information identifies suggestions and factors to maintain adequate stability that you can do and should be aware of. They are merely guidelines and suggestions. To establish specific stability characteristics of your vessel, it is always advisable to have your stability evaluated by a qualified individual.



POSITION OF WEIGHTS THAT AFFECT YOUR STABILITY

Load Height

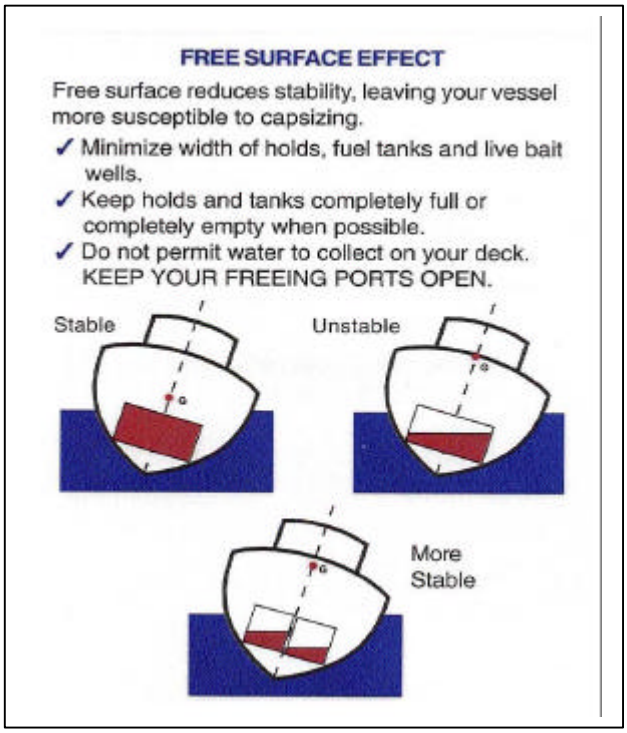
Height of traps and pots on deck can adversely affect stability and make the vessel top heavy. The higher pots are stacked, the greater stability is reduced. In rough weather a vulnerable vessel might not recover from a roll. *In heavy weather, limit the height of stacked traps, fill or empty live tanks, and secure gear aloft. Central, lower, secure weight is better.*

The righting moment is a measure of the tendency of a hull to right itself when outside heeling forces such as wind or waves act on it. The range of stability is the degree of the heel angles at which the vessel is able to remain upright. Maintain a good maximum righting moment and k*eep all weights low in the vessel*. Adding weights high on a vessel raises the center of gravity. Removing weights low on a vessel also raises the Center of Gravity***. Raising the Center of Gravity causes a vessel to be extremely tender (top heavy) which might prevent recovery from a minor roll.***

Gear Above Deck.

The stability of multirigged boats that have rigging installed aloft for trolling and other fisheries is often adversely effected when traps are loaded aboard. The high gear causes a top-heavy effect. Keeping weights low in the vessel lowers the center of gravity and makes for a "stiffer", more stable boat.

Free Surface Effect



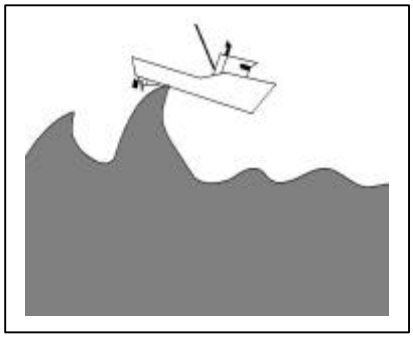
A free surface is any fluid surface that can shift as the boat rolls. Half-filled fuel tanks, water tanks, and live tanks are examples of spaces which contain free surface. Water trapped on deck as a result of poor deck drainage is another example of free surface. As the liquid shifts (e.g. live wells, tanks, fuel, etc.) so does the center of gravity, which affects the stability of the vessel. At 64 lbs. per cu.ft., large amounts of water rushing to one side of the vessel is the

same as a massive shift of weight. With each increase in the width of a tank, you get a three fold force on the vessel righting ability. ***Splitting up the tank into smaller tanks, or using binboards or baffles to divide tanks into sections, can help reduce the free surface effect. Minimize widths of cargo holds, fuel tanks and live baitwells. Keep holds and tanks completely full or completely empty when possible. Do not permit water to collect on deck -- keep your freeing ports open and clear of debris.***

Lack of Freeboard/Excess Weight & Overloading

An increase in vessel draft greatly affects stability. Loading a vessel to produce a slower roll is sometimes thought to be more "seakindly" but, in reality the vessel is less likely to survive a heavy roll in bad weather—it's overloaded. The deeper the draft the less freeboard and less stability. *The deck being lower to the water is more vulnerable to water on deck, leading to increased risk of on deck free surface effect and downflooding through unsecure hatches and vent openings.*

Following Seas



Being perched on a wave can significantly reduce a vessel's stability. When the length of the wave is twice that of the vessel, and the vessel's speed is the same as the speed of the wave, the vessel can sit on the wave. Large portions of the vessel can then come out of the water, throwing off the vessel's stability. Avoid following seas especially in adverse weather. Following seas are dangerous because of the chance of being swamped. *When dealing with heavy weather, you might try reducing speed or changing course to reduce risk to your vessel and crew.*

Vessel Safety Program

The Commercial Fishing Vessel Safety Program has a new booklet, "A Best Practices Guide in Vessel Stability" available free of charge. The booklet also has a guide for performing damage control on your vessel and how to put your own damage control kit together. To obtain a copy, just call your local Dockside Examiner:

Monterey to Crescent City	Dana Point to Morro Bay	San Diego to Oceanside
(510) 437-5788	(562) 980-4482	(619) 683-6497

Eleventh Coast Guard District Commander sends letter to Commercial Fishing Industry

On August 2, 1999, Vice Admiral Thomas H. Collins, Eleventh Coast Guard District Commander, signed a letter describing immediate non-regulatory initiatives that would be implemented in an attempt to decrease fishing vessel casualties. Besides being included in this newsletter it was mailed (at time of signing) to the fishing industry associations throughout California

16711
2 August 1999

To Members of the Commercial Fishing Industry,

In late April, the U.S. Coast Guard Fishing Vessel Casualty Task Force released a report titled "Living to Fish / Dying to Fish" and made 59 specific recommendations to improve safety within the commercial fishing industry. The report was written in response to the sinking of four fishing vessels off the Atlantic coast earlier this year, which resulted in the loss of 11 fishermen. The Commercial Fishing Industry Vessel Advisory Committee (CFIVAC), a committee comprised of commercial fishing industry representatives who advise the Coast Guard on fishing vessel safety matters, issued a response to the Task Force report and made a separate set of recommendations.

The Task Force report and the CFIVAC's response held widely different opinions on the solutions to the various safety problems facing the commercial fishing industry. Nevertheless, both the Coast Guard and the CFIVAC strongly supported several measures that could have a positive impact on fishing vessel safety and would not require creating new regulations. Measures that can be implemented immediately by the Coast Guard include:

- Reinforcing the value of a Voluntary Coast Guard Dockside Exam decal by increasing boarding emphasis on fishing vessels without the decal. Fishing vessels without a decal will receive a much more thorough safety examination when being boarded at sea.

- Ensuring that currently required safety training and emergency drills are being conducted. Compliance with existing regulations will be checked on all fishing vessels boarded at sea, regardless of whether the vessel has a decal.

- Providing fishermen who are issued a citation during an at sea boarding the opportunity to have a portion (or in certain situations all) of the civil penalties waived. By participating in a "Compliance Incentive / Fix-It Program," the Coast

Guard will provide owners and operators the chance to bring their vessels into compliance with existing safety regulations without going through the civil penalty process.

Starting September 1, 1999 the above recommendations will be implemented by Coast Guard units in California. Other Coast Guard units in Oregon, Washington, Alaska and Hawaii will be adopting similar strategies within the same time frame. I am seeking your support of these initiatives and invite you to join me in this effort to improve fishing vessel safety by:

- Encouraging your members to improve the condition on their boats by participating in the voluntary dockside exam program,

- Stressing the need to conduct safety training and emergency drills,

- Recommending that your members participate in the Compliance Incentive / Fix It Program.

Commercial fishing continues to be a highly dangerous profession. While significant declines in fatalities have been made in Alaska over the last ten years, the fatality rate for California commercial fishers has remained constant. I'm sure you will agree with James Herbert, Chairman of the Commercial Fishing Industry Vessel Advisory Committee, that "current level of loss of life and vessels is not acceptable" and that the current situation needs to be improved. By working together, significant strides can be made towards reducing sinkings, injuries and fatalities in the commercial fishing industry.

I heartily welcome any input or questions you may have regarding this important matter. My point of contact for commercial fishing vessel safety issues is Mr. Dennis Robison, who can be reached at (510) 437-2947. Thank you again for your support.

Sincerely,

THOMAS H. COLLINS
Vice Admiral, U.S. Coast Guard
Eleventh Coast Guard District Commander

What is "Thorough Safety Examination"

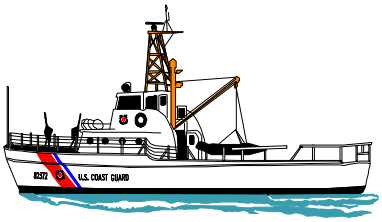
One of the measures listed in Vice Admiral Collins' letter to be implemented was "Reinforcing the value of a Voluntary Coast Guard Dockside Exam decal by increasing boarding emphasis on fishing vessels without the decal. Fishing vessels without a decal will receive a much more thorough safety examination when being boarded at sea." The definition of "thorough safety examination" means that the following applicable items will be checked during the course of the safety check portion of the boarding.

REQUIREMENTS FOR ALL VESSELS

PFD's/Survival Suit; Ring Buoy; Survival Craft; Stowage of Survival Craft; Survival Craft Equipment; Lifesaving Equipment Makings/Maintenance/Inspection; Distress Signals; EPIRB; Fire Extinguishing Equipment; Injury Placard; Waste Management Plan; Marine Sanitation Devices; Inland Navigation Rules; Navigation/Anchor Lights; Pollution Placard; Garbage Placard; FCC License; and Numbering.

ADDITIONAL REQUIREMENTS FOR DOCUMENTED VESSELS

Fireman's Outfit and SCBA; First Aid Equipment and Training; Guards for Exposed Hazards; Navigational Information; Compasses; Anchors and Radar Reflectors; General Alarm System; Communication Equipment; High Water Alarms; Bilge Pumps, Piping, and Dewatering Systems; Electronic Position Fixing Devices; Emergency Instructions; and Instructions, Drills, and Safety Orientation.



Note: There are additional requirements for vessels which the keel was laid or are at a similar stage of construction, or which undergo a major conversion completed on or after 15 September 1991, and that operate with more than 16 individuals on board. For more information on these requirements contact your local Dockside Examiner.

For more complete definitions check our web site at http://www.uscg.mil/pacarea/pm or contact your local Dockside Examiner.

Eleventh District Casualty Data
January 1998 through December 1999*

	98	99
Lives Lost	12	10
Taking on Water	19	10
Disabled	42	60**
Sunk	13	11
Aground	8	14
Medevac	5	3
Capsized	5	3
Fire	3	5
Man Overboard	0	0
Collision	4	0
False EPIRB	28	57

11TH District Fishing Vessel Safety Contacts

District

Mr. Dennis Robison (510) 437 2947
E-Mail: drobison@d11.uscg.mil

Dockside Examiners

San Diego to Oceanside

BM1 Mark Walker (619) 683 6497

Dana Point to Morro Bay

Mr. Fran McClain (562) 980 4478

Monterey to Crescent City*

Mr. Rob Lee (510) 437 5788
***Eureka and Crescent City only**
CWO Phil Duryea (707) 839 6111

* This data is based on situation reports (SITREPS) from Coast Guard field units, received at the Eleventh District Office.

** In 1998 13 (32%) cases were listed as engine failure. In 1999 41 (69%) cases have been listed as engine failure.

FREE EPIRB CHECK

Have you ever wondered if your EPIRB would transmit a signal if you turned it on? You needn't worry. The Coast Guard has several EPIRB testers available that actually validate an alert transmission without causing a false alarm. This is accomplished by turning the device on inside a specially designed copper-lined enclosure. A computer attached to the EPIRB reads its identification number and signal strength that would be sent to a rescue coordination center via satellite in an actual emergency. To obtain this test free of charge right on your boat, just call your local dockside examiner (listed in box above).

CALIFORNIA COASTAL UNITS

Shore Stations:

Soma: Station Humboldt Bay	(707) 443 2212
Fort Bragg: Station Noyo River	(707) 964 6612
Bodega Bay: Station Bodega Bay	(707) 875 3596
Sausalito: Station Golden Gate	(415) 331 8247
Monterey: Station Monterey	(831) 647 7300
Morro Bay: Station Morro Bay	(805) 772 2711
Oxnard: Station Channel Island	(805) 985 9822
San Pedro: Station LA/LB	(310) 732 7300
San Diego: Station San Diego	(619) 683 6360

Floating Units:

Crescent City: CGC Dorado	(707) 464 2172
Eureka: CGC Barracida	(707) 444 0471
Bodega Bay: CGC Point Chico	(707) 875 2131
San Francisco: CGC Point Brower	(415) 399 3480
Monterey: CGC Hawksbill	(831) 647 7377
Santa Barbara: CGC Point Camden	(805) 966 3093
Marina Del Rey: CGC Point Bridge	(310) 823 2300
Corona Del Mar: CGC Point Stuart	(714) 673 0420
San Diego: CGC Edisto	(619) 222 0956
CGC Tybee	(619) 223 3660
CGC Long Island	(619) 222 9549

Air Stations:

McKinleyville: Air Station Humboldt Bay	(707) 839 6111
San Francisco: Air Station San Francisco	(650) 876 2900
Los Angeles: Air Station Los Angeles	(310) 215 2112
San Diego: Air Station San Diego	(619) 683 6470

AIR AND SHORE STATIONS CAN BE REACHED ON

VHF CHANNEL 16

Commander (Pm)
Eleventh Coast Guard District
Building 50-6
Coast Guard Island
Alameda, CA 94501-5100